

The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

Listing of The Claims:

1-34. (Cancelled)

35. (Currently amended) An isolated polynucleotide comprising consisting essentially of a nucleic acid sequence listed as SEQ ID NO: 1 or a complimentary strand thereof.

36. (Cancelled)

37. (Currently amended) An isolated polynucleotide comprising consisting essentially of more than 15 contiguous nucleotides of a sequence listed as SEQ ID NO:1 or a complementary strand thereof.

38. (Currently amended) An isolated peptide encoded by an isolated polynucleotide comprising consisting essentially of a sequence listed as SEQ ID NO: 1 or a complementary strand thereof.

39. (Cancelled)

40. (Currently amended) An isolated polynucleotide comprising consisting essentially of a nucleic acid encoding a peptide selected from the group consisting of SEQ ID. NO: 2, SEQ ID NO:3, and SEQ ID NO:4.

41. (Currently amended) An isolated peptide comprising consisting essentially of the peptide listed as SEQ ID NO:3.

42. (Currently amended) An isolated peptide comprising consisting essentially of the peptide listed as SEQ ID NO:4.

43-46. (Cancelled)

47. (Previously amended) A vector comprising an isolated polynucleotide according to claim 35, 37, or 40.

48-58. (Cancelled)

59. (Original) A host cell comprising the vector of claim 47.

60. (Currently amended) An isolated peptide comprising consisting essentially of the peptide listed as SEQ ID NO:2.

61. (Currently amended) A method of identifying an agonist or antagonist of an opioid receptor-like 1 (ORL₁) receptor, said method comprising:

(a) contacting an ORL₁ receptor with an isolated peptide comprising the sequence of SEQ ID NO: 2 in the presence and or absence of a candidate modulator under conditions permitting the binding of said isolated peptide to said ORL₁ receptor; and

(b) measuring the binding of said ORL₁ receptor to said isolated peptide, wherein a decrease in binding in the presence of said candidate modulator, relative to the binding in the absence of said candidate modulator identifies said candidate modulator as an agonist or antagonist of said ORL₁ receptor.

62. (Previously presented) The method of claim 61, wherein said ORL₁ receptor is present in or on a cell.

63. (Previously presented) The method of claim 61, wherein said ORL₁ receptor is present in a membrane fraction from cells which express said ORL₁ receptor.

64. (Currently amended) A method for identifying an ~~agonist or~~ antagonist of an opioid receptor like 1 (ORL₁) comprising:

(a) contacting an ORL₁ receptor with a polypeptide comprising the sequence of SEQ ID NO: 2 in the presence of a candidate modulator under conditions which permit binding of said polypeptide to said ORL₁ receptor; and

(b) measuring production of a second messenger wherein a change in the concentration of a second messenger measured in the presence of said candidate modulator

relative to the concentration of said second messenger in the absence of said candidate modulator identifies said candidate modulator as an agonist or antagonist of said ORL₁ receptor.

65. (Previously presented) The method of claim 64, wherein said second messenger is cAMP.

66. (New) A method of identifying an agent that binds to an opioid receptor-like 1 (ORL₁) receptor, said method comprising:

(a) contacting an ORL₁ receptor with an isolated peptide comprising the sequence of SEQ ID NO: 2 in the presence or absence of said agent under conditions permitting the binding of said isolated peptide to said ORL₁ receptor; and

(b) measuring the binding of said ORL₁ receptor to said isolated peptide, wherein a decrease in binding in the presence of said agent, relative to the binding in the absence of said agent identifies said agent as an agent that binds to said ORL₁ receptor.